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MADRAS RECORD OFFICE.**Government of Madras.***Public Works* **DEPARTMENT.**

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<u>221-222</u>	
Dated <u>16 - 8 -</u>	<u>1864.</u>

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
10th August 1864.*

No. 221. Read the following Proceedings of the Madras Government in the Military
Department:—

Passing orders on the papers relating to certain alterations
and additions to existing Regulations connected with the
Survey Class, as recommended by the Principal of the Civil
Engineering College. } (Here enter 3rd August 1864, No. 2,678.)

No. 222. ORDER THEREON, 10th August 1864, No. 2,290.
Ordered to be recorded.

(True Extract.)

(Signed) J. H. M. SHAW STEWART, Major, R. E.,
Deputy Secretary to Government.

Exd, S. T. Augustin.

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MILITARY DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following papers :—

Memorandum from the Adjutant General, Fort Saint George, 29th April 1864, No. 209 ; to the Secretary to Government, Military Department.

In submitting the within letter from the Principal Civil Engineering College, the Commander-in-Chief has the honor to recommend, that the suggestions contained in paragraphs 7 to the end, for the more efficient working of the Officers' Surveying Class attached to the College, may receive the favorable consideration of Government.

2. The first part of Captain Edgcome's letter has been disposed of in the Quarter Master General's Department.

Memorandum from the Quarter Master General, Fort Saint George, 18th April 1864, No. 4013.

Transferred to the Adjutant General for disposal. The first six paragraphs have been disposed of in this Office.

From the Principal Civil Engineering College, Chepauk, 4th April 1864, No. 942 ; to the Quarter Master General, Fort Saint George.

I have the honor to request that you will be good enough to submit, for the consideration of His Excellency the Commander-in-Chief, the following proposition for the more efficient working of the Officers' Surveying Class attached to the College.

2. Before detailing the new scheme, however, it will be necessary to describe the present constitution of the Class, in order to show its defects and the desirableness of the change I propose.

3. The Officers' Surveying Class was established under G. O. No. 4127, dated 1st December 1862, in consequence of the representation by Colonel Carpendale, Royal Engineer, (then Principal of the Civil Engineering College) of the difficulties young Officers experienced, and the expense they were put to, in order to qualify for the Certificate in Surveying, and of the facilities which the Civil Engineering College afforded for instruction without any increased Establishment of Masters.

4. The number of Officers studying in the Class was limited to ten, each paying a monthly fee of 16 Rupees, which would go to defray the Masters, so that there should be no additional expense to the State.

5. The old Certificate of qualification in Surveying, sanctioned in G. O. C. C., dated 22nd September 1854, was changed to that now prescribed, (copy of which is enclosed) in order that Officers might be acquainted with the use of the Theodolite.

6. I am of opinion, however, that this amended Certificate is defective, and for this reason, viz., that an Officer may be competent to do all that it prescribes, and yet have no knowledge whatever of a most important branch of Surveying, viz., Hill sketching or the representation of ground. I therefore beg to recommend that the Certificate be modified, so as not only to include the qualifications required of a Revenue Surveyor, but further that it should embrace a competent knowledge of Military Surveying, and I enclose a copy of the modified Certificate for approval.

7. Another and a very serious defect in the present constitution of the Class is that whereby the remuneration of the Masters is made dependent on the Fees of the Students. If the Class could always be kept at its full strength, there would result the inconvenience of having more than one Master for the Class, for it must be remembered that the Masters have their own legitimate duties in their College apart from the instruction of the Officers' Class—and, in order that the *minimum* of their time may be spared from these duties, it is necessary to employ a *maximum* number of Masters for the extra work—and this of itself is a defect, for apart from the different systems of teaching that each Master may have, the employment of three Masters to instruct a Class of ten Officers is absurd.

8. But when, as during the past Session, the Class has been reduced by sickness or death to three Officers, the difficulty is to find funds adequate to remunerate the single Master who can be entertained. In either case, therefore, this system of remuneration of the Masters impairs the efficiency of the Class.

9. I therefore suggest the appointment of a duly qualified Instructor in Military Surveying and Drawing, and as this requires a special education, I would recommend that an Officer of Royal Engineers be appointed on a fixed Staff salary of say (250) Rupees a month, exclusive of Regimental Pay and Allowances, and that he be designated Assistant to the Principal and Professor of Surveying. There would be no difficulty in finding a competent Officer amongst the many young Engineer Officers who have recently arrived from England and are still unemployed—and if my proposal is approved of, and I be allowed to nominate, I could name an Officer (highly distinguished at Addiscombe in Military Surveying and Drawing) and admirably qualified for the situation.

10. I would further propose :—

1st. That the Class consist of twelve Officers, each paying a monthly fee of 20 Rupees, the proceeds to be carried to credit of Government in *general* Account.

2nd. That each Officer study and be required to pass an examination in one of the Vernacular languages during his stay at the College. I am aware that Hindoostanee is the language considered essential for all Staff Officers—but I would suggest the substitution of Tamil or Telugu, as being more useful in this Presidency, and as there are Moonshes for these languages attached to this College, I would propose that each Officer pay an extra monthly fee of 5/ in order to remunerate them for their extra work and trouble.

3rd. That the course of instruction (including the study of a Vernacular language) be extended to twelve months, and commence on 1st August of each year.

4th. That Officers studying at the College be considered "absent on duty."

5th. That the present Regulations regarding appointments and removal of Officers remain unchanged.

6th. That in consideration of the special character of the instruction, Certificates be *only* granted at this College.

11. The above are the leading features of the new scheme, but any minor details can be arranged after sanction has been accorded for the formation of such a Class.

At present the Officers are necessarily obliged to confine their Surveying operations to Madras and its immediate vicinity, but under a competent Military Instructor they might be despatched into the interior to make Route Surveys for Troops, draw up Reports and Reconnoissances of such portions of the country as Government might require—in fact, go through a thorough practical course of instruction on Military Surveying, such as is necessary for all Officers employed in Quarter Master General's Department.

12. I feel confident that the formation of such a Class would be attended with the best possible results, and if my scheme meet with His Excellency's approval, I beg it will be laid before Government, with His Excellency's recommendation and support.

CIVIL ENGINEERING COLLEGE, MADRAS.
Certificate of qualification in Surveying.

I have examined _____
and find

1. That he possesses a good knowledge of the use of the Prismatic Compass and Chains, Box Sextant, Theodolite and Levelling Instruments, including the adjustments of the two latter.

2. That he is perfectly competent to Survey with the Chain only, with the Prismatic Compass and Chain, and with the Theodolite and Chain; also to Survey and take Sections with the Y Level, and with Trongton and Simm's Level, including in every case, keeping Field Books, Plotting and finishing the Drawing.

3. That he is also competent to make a Route Sketch or Reconnoissance of a portion of country, or of a Military Position, and to represent with facility and accuracy the features of the ground either with Pen and Ink, Pencil or Brush.

The Plans executed by

upon which this Certificate is granted, are attached.

(Signed) W. H. EDGCOMBE, Captain, R. E.,
Principal Civil Engineering College.

From the Controller of Military Accounts, Fort Saint George, 19th May 1864, A; to the Secretary to Government, Military Department.

I have the honor to forward a letter from the Principal of the Civil Engineering College, to the Quarter Master General, under the Adjutant General's docket of the 29th April 1864, No. 209.

Dated 4th April 1864, No. 942.

2. It is proposed to appoint an Officer of Engineers on a salary of Rupees 250 a month, as Assistant to the Principal and Professor of Surveying for the purpose of instructing the Officers composing the Surveying Class.

3. It is also proposed that the Class should consist of twelve Officers instead of being limited to ten, and that each should pay a fee of 20 instead of 16 Rupees per mensem, and further, that a fee of 5 Rupees should be added to remunerate Telugu and Tamil Moonshes of the Institution, for instruction in those languages in which it is proposed the Officers should pass an examination.

4. The Class was established on the understanding that it was to be instructed by Masters in the Institution, without additional expense to Government.

5. The proposal now made involves considerable expense. Assuming that a

Pay and ordinary Regimental allowances of	
Lieutenant of Engineers, at Rupees 234-14,	
per month.....	Rs. 2,818 8 0
Staff salary as Assistant to Principal and	
Professor of Surveying.....	„ 3,000 0 0
Rupees...	5,818 8 0

Lieutenant of Engineers holds the appointment, it would involve an outlay of Rupees 5,818-8 per annum, much greater, I would submit, than the object to be attained would justify, or

the number of Officers under instruction, calls for.

6. In regard to the study of the language, it does not involve expense to Government, but if it is intended to substitute Tamil or Telugu for Hindoostanee, the former languages would not of themselves, under present Regulations, qualify for General Staff employ.

7. The question, however, is one which it is more within the province of the Civil Department than this Office to discuss, as it is presumed that, if the appointment of an Assistant were sanctioned, the Pay and allowances as well as the salary of the Assistant would, similarly to those of the Principal, be disbursed by the Civil Department.

Referred, with Memorandum from the Adjutant General, 29th April 1864, No. 209, to the Commander-in-Chief, (Quarter Master General's Department) and through the Revenue Department to the Superintendent of Revenue Survey, also to the Department of Public Works, in view to a Statement being submitted to Government of the probable annual demand in those Departments for the services of Officers and men qualifying at the Engineering College in the Survey Class.

3rd June 1864.

Proceedings of the Madras Government, Public Works Department.

Read the following Proceedings of the Madras Government in the Military Department.

Requesting to be furnished with a Statement of the probable annual demand for the services of Officers and men qualifying at the Engineering College in the Survey Class.

Here enter 3rd June 1864.

ORDER THEREON, 8th June 1864, No. 1676.

It will be intimated to the Military Department, with reference to the Orders recorded above, that there is at present no demand in the Department of Public Works, for the services of Officers and men qualifying only as Surveyors at the Civil Engineering College.

(True Extract.)

(Signed) C. A. ORR, Colonel, R. E.,
Secretary to Government.

Proceedings of the Madras Government, Revenue Department.

Read the following Proceedings of the Madras Government in the Military Department.

Referring to the Revenue Department certain correspondence from the Adjutant General, Principal Civil Engineering College, and Controller of Military Accounts, in view to a Statement being submitted to Government of the annual demand in this Department, for the services of Officers and men qualifying at the Civil Engineering College in Survey Class. } Here enter 3rd June 1864.

ORDER THEREON, 10th June 1864, No. 986.

Ordered to be communicated to the Superintendent of Revenue Survey, who will submit the information required in the Order in the Military Department above recorded.

Miscellaneous.

(True Extract.)

(Signed) C. G. MASTER,
Deputy Secretary to Government.

From the Quarter Master General, Head Quarters, Ootacamund, 8th July 1864, No. $\frac{104}{6569}$; to the Secretary to Government, Military Department.

I have the honor, by order of His Excellency the Commander-in-Chief, with reference to the Order of Government, dated 3rd ultimo, on the subject of certain measures proposed by the Principal of the Civil Engineering College, to forward a Statement from that Officer which will contribute to the information called for by Government.

2. There is no demand either for Officers or men educated in the College, in the Quarter Master General's Department. It has no European Subordinates in the Survey, and the number of Officers required to possess a knowledge of Surveying, is limited to the number attached to Divisions, who as they are liable to be relieved on the expiry of their Staff tenure, require but seldom to be re-placed by others, many of whom pass up-country.

[Statement

STATEMENT showing the number of Stipendiary and Sapper Students who were admitted into the 2nd Department of the Civil Engineering College since 1859, and obtained Certificates of qualification as Overseers for the Department Public Works and employment.

1859.	1860.	1861.	1862.	1863.	1864.	Total.
Number of men admitted.	Number who obtained Certificates.	Number employed in the Dept. Public Works.	Number admitted.	Number obtained Certificates.	Number employed in the Dept. Public Works.	Number admitted.
14	4	4	21	15	15	43
28	24	15	3	2	9	0
0	0	6	0	4	108	50
45						

Nine Military men obtained Certificates in 1858 and 1859 without entering College. Of the total number who obtained Certificates, one is employed in the Mofussil Police, one went back to Head Quarters Sappers and Miners, Dowlaisweram, at his own request, four have been remanded to their Regiments, one is employed in the Commissariat, one died, one has applied for his discharge, and the remaining forty-one are now employed in the Department of Public Works. There are twenty-three Military Students in the College at present.

CIVIL ENGINEERING COLLEGE, } (Signed) J. M. STEWART, Major, R. E.,
CHEPAUK, 30th June 1864. } For Principal.

MEMORANDUM of Officers who joined the first Department and Survey Class of the Civil Engineering College since their formation.

First Department.				Survey Class.			
1862.		1864.		1862.		1864.	
Number admitted.	Number obtained Certificates as Assistant Engineer.	Number admitted.	Remaining in College.	Number admitted.	Number obtained Certificates in Surveying.	Number admitted.	Number obtained Certificates in Surveying.
a 4	1	3	3	b 22	20	c 7	1

- (a) One transferred to Survey Class.
Two re-joined their Regiments.
(b) One left, one on leave.
(c) Two went on leave, one re-joined Regiment, one died, and two remain in College.
Two Officers who obtained Certificates in Surveying have joined the 1st Department.

CIVIL ENGINEERING COLLEGE, } (Signed) J. M. STEWART, Major, R. E.,
CHEPAUK, 30th June 1864. } For Principal.

Proceedings of the Madras Government, Revenue Department.

Read the following letter from the Superintendent of Revenue Survey, Bangalore, 21st June 1864, No. 391/16; to the Secretary to Government, Revenue Department, Fort Saint George.

1. The demand for Surveyors mentioned in my former applications for the services of Ordnance Artificers still continuing and in fact increasing, and Government having decided that it is not advisable any more of these Artificers should be employed on the Staff, I have the honor to request the sanction of Go-

Dated 18th May 1861, No. 506.
Do. 25th September 1863, No. 739/36.

* Say six at present, pay on entering from Rupees 25 upwards, according to qualifications.

vernment to a certain number* of the Corps of Sappers and Miners being appointed to the Revenue Survey.

2. In General Orders, dated 9th December 1859, the Commander-in-Chief issued Regulations (approved by Government) for instructing a certain number of men in the more scientific branches of their profession. Some considerable time ago I applied to the Officer Commanding the Sappers for the services of some of these trained men, and on a visit to the Rajahmundry District made a personal application to Captain Rodgers, then in Command at Dowlaishweram. A number of Maps, &c., were sent to my Office, Chepauk, for inspection, and several Non-Commissioned Officers and Privates of the Company then employed at Madras, under the Command of Captain Dukin, attended for examination. I named those that appeared most likely to be useful. The Officer Commanding at Dowlaishweram however (as far as my recollection serves) wrote to me either demi-officially or privately to the effect, that he wished some more men instructed before he could spare any for the Survey. Since then I have not moved in the matter.

3. It appears to me that such an opening as is afforded by the Survey would, if offered to deserving and well-conducted men, act as a stimulus to good conduct and application to study, while it would supply the Survey with fair Surveyors possessing health, strength, and habits of obedience.

4. I may mention, in conclusion, that I have given employment to seven persons who had studied at the Civil Engineering College, and have informed the Principal of that Institution that I am prepared to give appointments to several more who have passed their examination in Surveying. Even if a large number than I anticipate accept the offer thus made, there will still remain a number of vacancies for which I am anxious to obtain persons who intend to remain in the Department, and not, as is so frequently the case, men who are neither accustomed to, nor inclined for the hard work and exposure of a Surveyor in this Department.

ORDER THEREON, 11th July 1864, No. 1211.

Miscellaneous.

Referred to the Military Department for consideration.

(True Extract.)

(Signed) C. G. MASTER,

Deputy Secretary to Government.

ORDER, No. 2678, 3rd August 1864.

The Governor in Council proceeds to pass orders on the foregoing papers, relating to certain alterations and additions to existing Regulations connected with the Survey Class, as recommended by the Principal of the Civil Engineering College.

2. The Scheme submitted proposed an increase of the Officers' Class, and the appointment of an Officer of Royal Engineers as Instructor, together with other points connected with fees and arrangements, &c., for the better management of the Military Survey Class.

3. The paper having been referred to the Departments concerned, in view to the probable annual demand for the services of Officers and men, qualified at the Engineering College in the Survey Class, being obtained, it appears, from the replies above recorded, that there is no present necessity for increasing the Class in question, or disturbing existing arrangements.

4. With reference, however, to the Proceedings in the Revenue Department above recorded, the Principal of the Civil Engineering College will be called upon, through the Educational Department, to report, in communication with Colonel Priestley, what number of qualified East Indians or Natives he could engage to supply for the Revenue Survey Department.

(True Extract.)

Alamuddin Khan
Deputy Secretary to Government.

To the Adjutant General.

.. Quarter Master General.

.. Controller of Military Accounts.

.. Public Works Department, *With 20 spare Copies.*

.. Revenue Department.

.. Educational Department.

.. Commanding Royal Engineer, for information.

Alamuddin Khan

1864 Sept
Pro. of Govt for Aust.

No 3497
Proceedings of Govt
Military Dept

Subst 32 } August 1864
Rec'd 84 } No 2678

Chapman
10th August 1864

Records

218 2290

Passing orders on
the papers relating to
certain alterations and
additions to existing Re-
gulations connected with
the Survey Class, as recom-
mended by the Principal
of the Civil Engineering
College.

299
218 2290-10th August 1864

No 221. 222

10

Recorded